

Module Three: Cognitive Flexibility



Cognitive Function and Learning Explained

Dear Teachers and School Facilitators,

Welcome to Module Three of the Cognitive Function and Learning Explained Curriculum. This pdf is intended to provide information, activities, and visual aids to support you and your students as they endeavor to understand their minds and how to develop the skills of lifelong learners.

All content is intended to be adaptable to your environment. Within each of the module pdfs, there will be “quick facts” sheets that provide quotes, evidence-based information, and definitions of terms to help you present this information to your students.

Some activities are derived from Cognitive Behavioral Therapy (CBT) practices, but they are never intended to be used therapeutically. This curriculum incorporates therapeutic tools; however, it is not a curriculum for therapeutic practice. It is focused on learning, study tools, and self-reflection to help adolescents develop their learning skills.

Thank you for your efforts to connect education to mental health!



Cognitive Flexibility Self-Assessment

1. When faced with a new or unfamiliar task, I:
 - Prefer sticking to familiar methods and approaches.
 - Am willing to try new strategies or perspectives.
 - Actively seek out different ways to approach the task.
2. I enjoy exploring different viewpoints and considering alternative solutions.
 - Rarely or never.
 - Sometimes.
 - Often or always.
3. I can easily adapt to changes in plans or unexpected situations.
 - Rarely or never.
 - Sometimes.
 - Often or always.
4. I am open to feedback and willing to modify my opinions or beliefs based on new information.
 - Rarely or never.
 - Sometimes.
 - Often or always.
5. I find it easy to switch between different tasks or topics without feeling overwhelmed.
 - Rarely or never.
 - Sometimes.
 - Often or always.



Cognitive Flexibility Self-Assessment

6. I enjoy brainstorming and generating creative ideas.
 - Rarely or never.
 - Sometimes.
 - Often or always.
7. I can see the big picture and consider multiple factors when making decisions.
 - Rarely or never.
 - Sometimes.
 - Often or always.
8. I can handle ambiguity and uncertainty without becoming anxious or stressed.
 - Rarely or never.
 - Sometimes.
 - Often or always.
9. I actively seek out new experiences and opportunities to learn.
 - Rarely or never.
 - Sometimes.
 - Often or always.
10. I enjoy solving puzzles or problems that require thinking outside the box.
 - Rarely or never.
 - Sometimes.
 - Often or always.



Cognitive Flexibility

allows us to switch gears and find new approaches to solve problems in our daily lives

Why Does it Matter?

Cognitive flexibility allows us to adapt and problem-solve. Obstacles or unexpected events happen often, and flexible thinking is an essential skill to overcome challenges.

What Flexible Thinking Looks Like

Imagine a student working on a group project where everyone has different ideas. Instead of insisting on their idea or becoming frustrated, the student listens and considers the strengths of each approach. Together, the group comes up with a creative solution that combines the best elements of each idea.

Cognitive Distortions

Exaggerated or irrational ways of thinking that can make situations seem worse than they really are

Why Does it Matter?

It is important to be able to recognize and identify cognitive distortions in our thinking as they can limit our ability to problem-solve and can create negative narratives that impact our mindset.



Cognitive Distortions

- **Overgeneralization** - Taking one instance or example and generalizing it to an overall pattern.
- **Catastrophizing** - Exaggerating the meaning, importance, or likelihood of things.
- **All-or-Nothing Thinking** - Also known as Black-and-White Thinking or Polarized Thinking. Thinking in extremes or absolutes.
- **Mind Reading** - The inaccurate belief that we know what others are thinking.
- **Emotional Reasoning** - The acceptance of one's emotion as fact.
- **Personalizing** - Taking things personally or inaccurately attributing personal responsibility or blame for events or situations.



The College Application Dilemma

A Cognitive Flexibility Case Study

Sarah is a high school senior who has been diligently preparing for college applications. She has researched various universities, attended college fairs, and worked hard to maintain good grades and extracurricular involvement.

As the application deadlines approach, Sarah faces a dilemma. Sarah has always dreamed of attending a prestigious university known for its rigorous academic programs and competitive admissions process. She believes that attending this university will guarantee her success in her future career.

However, she is also interested in a lesser-known university that offers a unique program in her chosen field of study. This university has a more lenient admissions process and a supportive community atmosphere.

The problem arises when Sarah receives rejection letters from some of the prestigious universities she applied to, including her top choice. She feels devastated and starts questioning her abilities and worth as a student. She begins to believe that if she doesn't get into a top-tier university, she won't achieve her career goals and will disappoint her family and teachers.

Despite receiving an acceptance letter from the lesser-known university, Sarah continues to dwell on her rejections and feels stuck in her decision-making process.

Task: Identify and explain at least two cognitive distortions that Sarah experiences in this scenario. Then, discuss how Sarah can apply cognitive flexibility skills, such as reframing her thoughts, considering alternative perspectives, and focusing on her values and goals, to make a well-informed and balanced decision about her college choice.



Strategies for Cognitive Flexibility

Perspective Taking

Being able to look at things from different angles and considering different viewpoints to solve a problem creatively

Reframing

Changing how you think about something to find new solutions or see new opportunities that were not apparent before

Brainstorming

Coming up with many ideas or solutions to a problem

Cognitive Flexibility Practice

Scenario

You are a high school student preparing for a group project in your biology class. Each group member has specific roles and tasks to complete for the project. However, one of your group members informs you at the last minute that they won't be able to contribute due to a family emergency.

Challenge

You must adapt to this unexpected change, redistributing tasks among the remaining group members and ensuring the project's successful completion within the deadline.

1. Describe your initial thoughts and feelings when you learn about the group member's absence and the increased workload for the project. Identify any negative thoughts or worries that come up, such as feeling overwhelmed or unsure about how to proceed.
2. Use strategies and realistic thinking to challenge and change any negative thoughts or beliefs about the situation.
3. Create a revised project plan with the group, including adjustments to deadlines and task assignments based on the new circumstances.
4. Reflect on the experience afterward and consider how your ability to adapt and stay flexible helped you overcome challenges and complete the project successfully.



Cognitive Flexibility Reflection Questions

Part One

- Why is cognitive flexibility important for students in today's rapidly changing world?
- How can practicing cognitive flexibility improve problem-solving skills and enhance creativity?
- What are some real-life examples of how cognitive flexibility can help individuals adapt to new challenges and opportunities?

Part Five

- How can practicing cognitive flexibility impact your problem-solving abilities in both familiar and unfamiliar situations?
- What experiences have you had in which applying flexible thinking helped you navigate a challenge or unexpected change?
- When can applying cognitive flexibility be challenging, and what strategies can you develop to enhance your flexibility in those situations?



The Problem-Solving Mind Example

Managing Stress During Exam Week

You have multiple exams and assignments due next week, and you're feeling overwhelmed and stressed. You have limited time and resources, and you're not sure how to prioritize your tasks while also taking care of your mental well-being.

Things to Consider

1. What strategies or techniques can you use to determine how to prioritize your tasks?
2. What tools and resources do you have available?
3. What decisions do you make to address the scenario?
4. What are the potential consequences of your decisions?

Cognitive Flexibility Action Plan

1. Identify an area of struggle, such as a school subject, an unhelpful habit, or a mindset.
2. Consider what cognitive distortions might be contributing to your struggle in that area.
3. Use techniques such as perspective-taking, brainstorming, and reframing to determine potential solutions to your area of struggle.
4. Determine what steps you can take to work through your cognitive distortion and area of struggle, as well as a method for monitoring your progress and following through on these steps.



The Problem-Solving Mind Scenario Cards

Scenario

You are in charge of organizing a school event, and on the day of the event, the main performer cancels last minute. You need to quickly find an alternative solution to ensure the event runs smoothly.

Scenario

You are working on a science experiment with a strict deadline, and the equipment you need becomes unavailable due to a lab scheduling conflict. You must find an alternative method or equipment to complete your experiment in time.

Scenario

You are studying for final exams, and your study group decides to change the meeting time and location unexpectedly. You need to adjust your personal schedule and find a new study method to stay on track with your preparation.

Scenario

You are writing a report for an environmental science project, and your primary source of data becomes unavailable due to a website outage. You need to find alternative data sources and adjust your analysis to complete the report.

Scenario

You are leading a community service project, and on the day of the event, a major supplier cancels the delivery of essential materials. You need to find a quick replacement to ensure the project can proceed as planned.

Scenario

You are participating in an academic competition, and the format changes unexpectedly from individual to team-based. You need to quickly coordinate with your new teammates and develop a unified approach to tackle the competition challenges.